Synthesis of the Four Diastereoisomers of the N-Terminal Amino Acids of Nikkomycins *via* Aminoalkylation with Preformed Ternary Iminium Salts*

Jeanne Delbos-Krampe, Nikolaus Risch, and Ulrich Flörke

Department Chemie der Universität Paderborn, Warburger Str. 100, D-33098 Paderborn, Germany

Reprint requests to Prof. Dr. N. Risch. Fax: +49(0)5251/603245; E-mail: nr@chemie.uni-paderborn.de

Z. Naturforsch. **59b**, 414 – 423 (2004); received January 13, 2004

Dedicated to Prof. Dr. Karsten Krohn on the occasion of his 60th birthday

An efficient and convenient two step synthesis of each of the four possible diastereoisomers of the N-terminal amino acid component of nikkomycins is described. We first synthesized α -amino- β -oxo acids by aminoalkylation of ketones with iminium salts. The second step using Pearlman's catalyst gave directly nonnatural and natural precursors 13-16 of nikkomycins 1 which were easily separated by chromatography on silica gel.

Key words: Nikkomycins, Mannich Bases, Aminoalkylation, Lactones, 1,3-Amino Alcohols